

# HOME MIX TT-500M

DJ turntable package

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## INTRODUCTION

Congratulations, you are one of many people who have chosen Homemix for all their DJ mixing needs.

Please study the entire manual and familiarise yourself with all of the controls and features of the TT-500M before attempting to use the equipment.

We have provided you with an easy to use fast setup which we recommend you use as a quick reference guide.

Please take note of the important safety information detailed on page 2 before starting to operated the TT-500M.

For more information on current and future Homemix products, please visit [www.homemix.com](http://www.homemix.com).



# SAFETY INSTRUCTIONS

## IMPORTANT: BEFORE USE.

A few points to note before you start setting up the turntables:

1. Do not connect the AC power
2. Read this manual carefully before using the unit and be sure to store the manual in a safe place for future reference. Should you lose your manual, you can download a replacement free of charge from [www.homemix.com](http://www.homemix.com)
3. Select the installation location of your unit carefully. Avoid placing it in direct sunlight, or in locations subject to vibration, excessive dust, heat, cold or moisture. Keep away from sources of hum such as transformers or motors.
4. Do not use this system where there are extreme temperatures (below 5 degrees Celsius or above 35 degrees Celsius).
5. Ensure your hands are clean when handling vinyl. Never use a cracked or warped disc.
6. When disconnecting the power cord from the mains outlet, always grasp it by the plug, never pull the cord.
7. Do not use force when operating the switches and buttons
8. Before moving the equipment, be sure to disconnect the power cord and all connecting cables.
9. Do not attempt to clean the unit with chemical solvents as this might damage the surface, simply use a clean, dry cloth.
10. If the unit malfunctions, do not attempt to repair it yourself as this might result in damage to the equipment, or electrical shock. Always call the Acoustic Solutions/HomeMix helpline on 0871 230 7747 to seek advice. This line is manned from 9:00am to 1:00pm and 2:00pm to 4:30 pm, Monday to Friday. Calls cost 10p per minute. mobile costs may vary, please contact your network provider.

## MAINS PLUG

For your convenience mains plugs with fuses have been fitted to this equipment. For your safety please observe the following information.

1. Should the fuse fail in the plug, remove the plug from the wall socket and replace the fuse with a 3 Amp ASTA approved BS 1362 fuse.

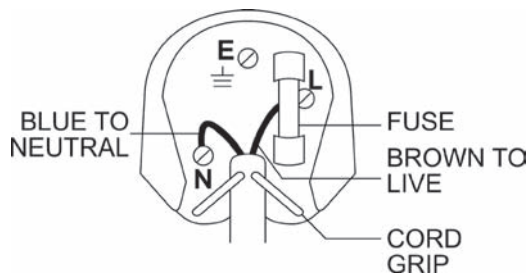
2. Never use the plug without the fuse cover fitted. Replacement fuse covers are available from your local electrical store.

3. If the mains plug is cut off from the cable, rewire the replacement plug in accordance with the instructions given in this manual.

- The wire which is coloured blue or black must be connected to the terminal with the letter N or coloured black
- The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red. Only a 3 Amp fuse should be fitted in the plug, or a 5 Amp fuse at the distribution board.

**WARNING: UNDER NO CIRCUMSTANCES MUST THE LIVE OR NEUTRAL WIRES BE CONNECTED TO THE EARTH TERMINAL IN A 3-PIN MAINS PLUG.**

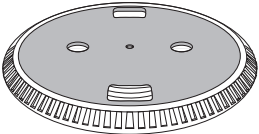
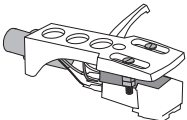

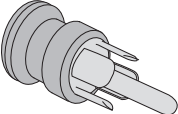
4. CAUTION: Under no circumstances should the discarded plug be inserted into a mains socket. To prevent a shock hazard, carefully dispose of the discarded plug. Do not leave the plug lying around where children might find it.

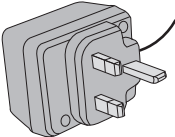
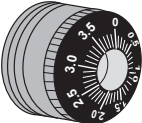

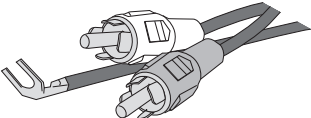



**CAUTION: DANGEROUS VOLTAGES EXIST INSIDE THIS UNIT. DO NOT ATTEMPT TO OPEN. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DISCONNECT FROM MAINS SUPPLY WHEN NOT IN USE.**

# PACK CONTENTS

The TT-500M consists of the following individual parts. A '\*' symbol next to a part indicates that the part has been pre-fitted for your convenience. Please refer to the part descriptions below. Should you need to order additional items, call the Acoustic Solutions/Homemix helpline on 0871 230 7747 to seek advice. This line is manned from 9:00am to 1:00pm and 2:00pm to 4:30 pm, Monday to Friday. Calls cost 10p per minute. mobile costs may vary, please contact your network provider for details.

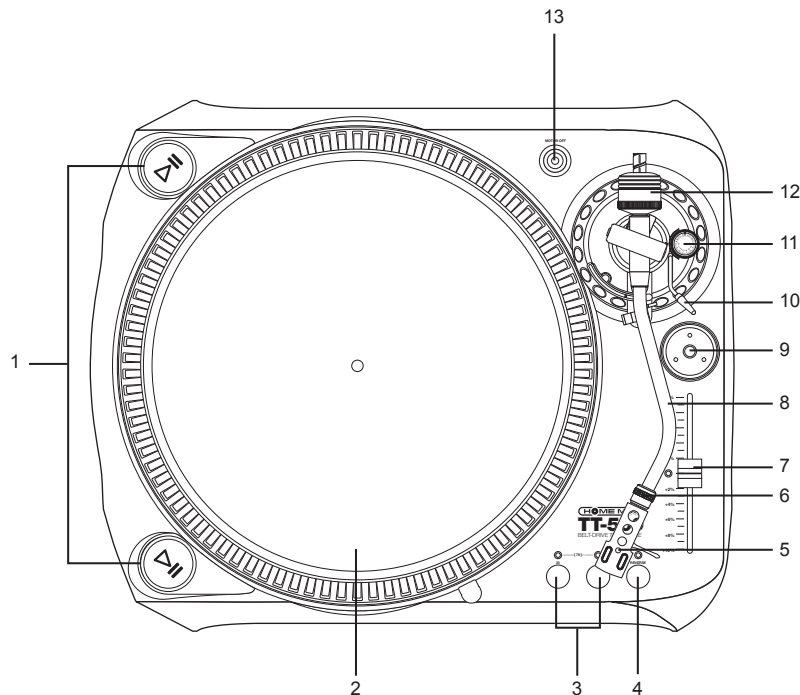
	PART NAME / QUANTITY
	Platter x 2
	Headshell x 2
	45 rpm adapter x 2
	Phono blanking plugs x 4*

	PART NAME / QUANTITY
	9v AC Adapter x 1
	Counterweight x 2
	Slipmat x 2
	RCA audio/ground cables x 2*
	Headphones x 1

# TT-500 FEATURES

## TOP VIEW

1. **START/STOP BUTTON.** Starts or stops the platter rotation.
2. **PLATTER.** Place record on in order to play music.
3. **PLATTER REVOLUTION SPEEDS.** Select your required platter speed. Press both 33rpm and 45rpm simultaneously to select 78rpm.
4. **PLATTER REVERSE BUTTON.** Select the reverse platter direction. Press one of the other platter revolution speed buttons to re-select a forward direction.
5. **HEADSHELL.** Holds the cartridge to the end of the tone arm.
6. **HEADSHELL LOCKING NUT.** Locks the head shell in place.
7. **PITCH ADJUST.** +/-10% PITCH ADJUST
8. **TO NE ARM.** For exact placement of the needle onto the vinyl.
9. **45 RPM ADAPTER.** Place on the centre spindle when playing 7" records with a larger centre hole.
10. **CUEING LEVER.** Lowers the tonearm onto the record.
11. **ANTI-SKATE KNOB.** Use to balance the sideways movement of the tone arm as the record plays.
12. **COUNTER WEIGHT.** Use to balance the tone arm and adjust the stylus pressure.
13. **MOTOR ON/OFF BUTTON.**



# TT-500 FEATURES

## REAR VIEW

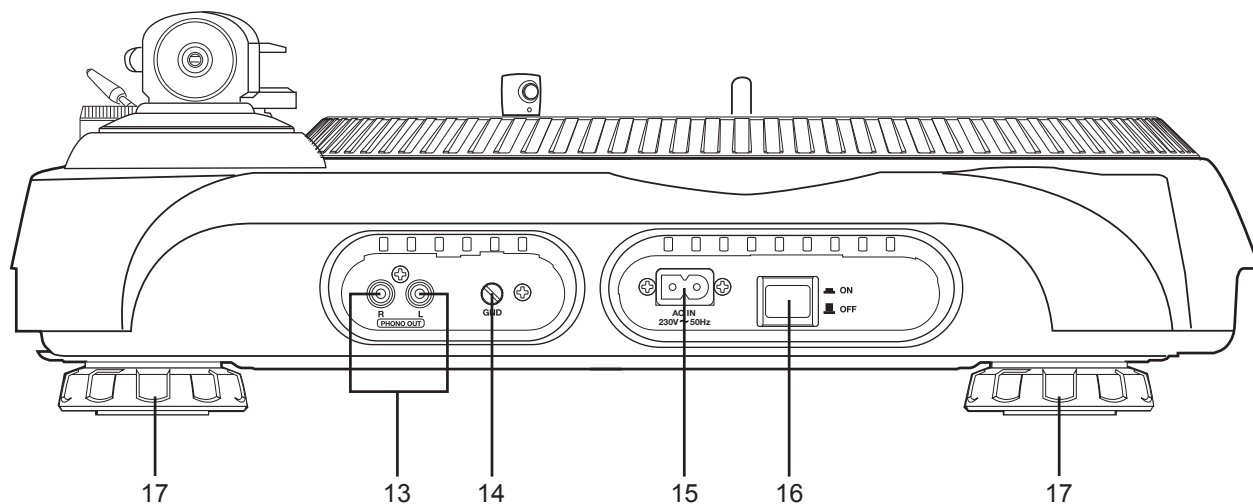
**13. PHONO OUTPUT.** Used to connect stereo turntable to mixer

**14. GND.** Ground wire connection post

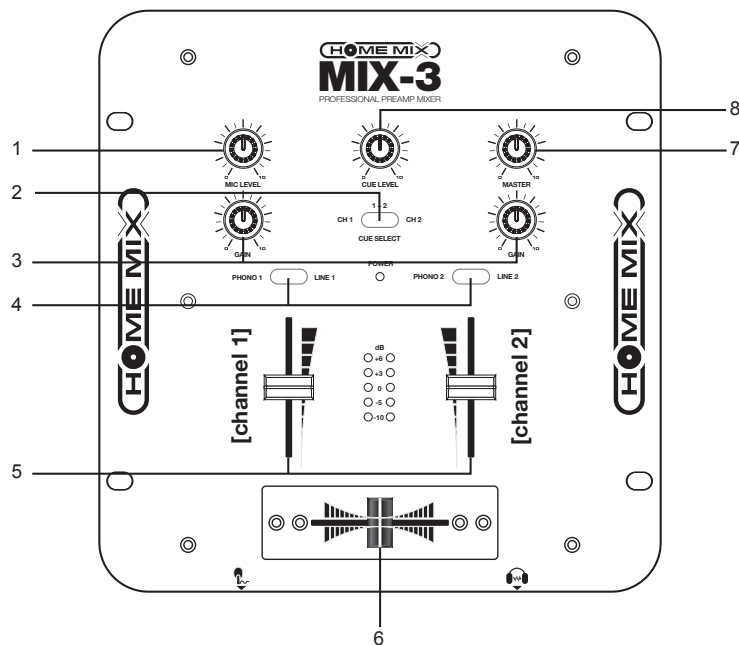
**15. AC INPUT.** Connects to mains via supplied AC power lead

**16. POWER SWITCH.** Turns the turntable on or off

**17. ADJUSTABLE FEET.** Adjust to level and to required height



# MIX-3 FEATURES



## TOP VIEW

**1. MIC LEVEL CONTROL.** Use to adjust the level of the microphone output.

**2. CHANNEL CUE.** Use to switch the headphone signal between channel 1, channel 2 or both simultaneously.

**3. CHANNEL GAIN CONTROLS.** Use to match the levels of each of the channels before mixing commences.

**4. INPUT SOURCE SELECTORS.** Select the input source you wish to feed into each of the channels.

**5. CHANNEL FADERS.** Controls the volume levels of each of the channels.

**6. CROSSFADER.** Allows a seamless mix between channel 1 and channel 2 by moving the crossfader from one side to another. **NOTE:** The crossfader is a consumable part.

**7. MASTER LEVEL CONTROL.** Use to adjust the overall output volume of the mixer.

**8. CUE LEVEL CONTROL.** Used to adjust the headphone volume.

# MIX-3 FEATURES

## FRONT / BACK VIEW

**9. MICROPHONE INPUT (front).** Insert a microphone with a 1/4" jack plug (microphone not supplied).

**10. HEADPHONE OUTPUT (front).** Insert the headphones with 1/4" jack plug (headphones supplied) .

**11. POWER SWITCH.** Switches the MIX-3 on or off.

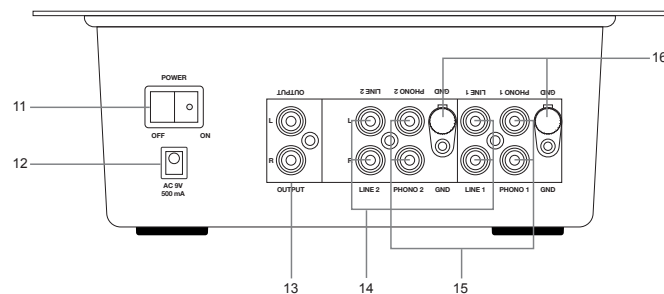
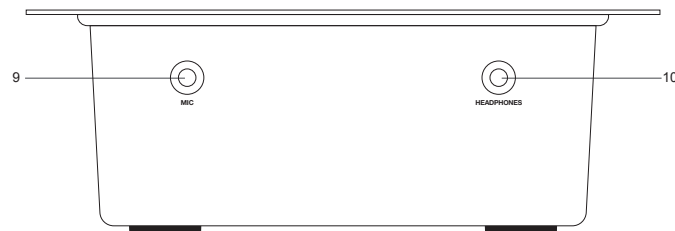
**12. AC INPUT SOCKET.** Connect the supplied AC power adapter.

**13. LINE OUTPUT.** Use to connect to an external amplifier/PA/recording device.

**14. LINE INPUTS.** Use to connect line level inputs (Tape, MD, CD, Tuners).

**15. PHONO INPUTS.** Used to connect to turntables (TT-500's).

**16. GROUND POSTS.** Ground post for turntable connection. If this is not connected when using a turntable then you may hear a loud buzz through that channel.



# TT-500 ASSEMBLY

Before you can use the TT-500M, you need to assemble the turntables. Follow the instructions below for fitting each of the parts for both turntables.

## FIG 1. Fitting the platter and belt

Place the platter on the centre spindle and spin the platter until the belt position holes (the two larger holes nearest to the belt) are showing the motor drive shaft in the top right corner. When this is exposed, carefully stretch the belt around the shaft, ensuring that the belt does not twist. The platter should still spin freely, but with slightly more resistance than before.

## FIG 2. Fitting the headshell

To fit the head shell, place the headshell into the end of the tone arm, ensuring that it is positioned horizontally. Whilst holding the headshell in its position turn the headshell nut in an anti-clockwise direction to secure it in place.

To remove the head shell, turn the head shell nut in a clockwise direction. This will unlock the head shell and allow it to be removed.

## FIG 3. Fitting the counter weight

Remove the stylus protector (do not touch the stylus tip during the adjustment) and set the cueing lever to the lower position. Release the arm clamp and lift the tonearm from the arm rest to free it. Rotate the counterweight until the tonearm is approximately balanced horizontally (floats freely). Refasten the tonearm with the arm clamp, hold the counterweight stationary with one hand and rotate only the stylus-pressure ring to bring the number "0" of the ring into alignment with the centre line on the tonearm rear shaft. Rotate the counterweight clockwise until the scale shows the value corresponding to the pressure of the stylus used. The stylus supplied with this system is rated at 3.5 grammes. If you use an alternative stylus/headshell arrangement, then please follow the manufacturer's specified tracking weight.

## Anti-skate knob

As a record plays, a force is generated drawing the stylus towards the centre of the record. Set this knob to the same value as the stylus pressure to offset this force.

FIG 1

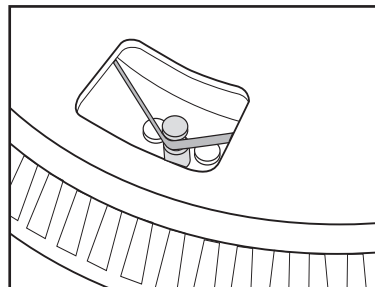


FIG 2

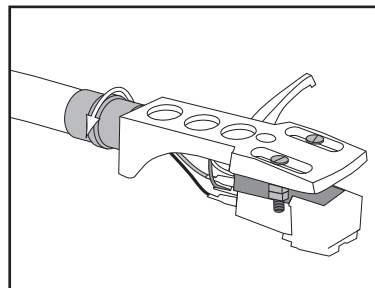
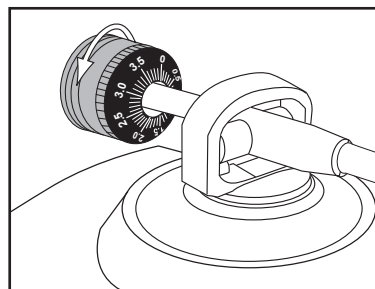


FIG 3

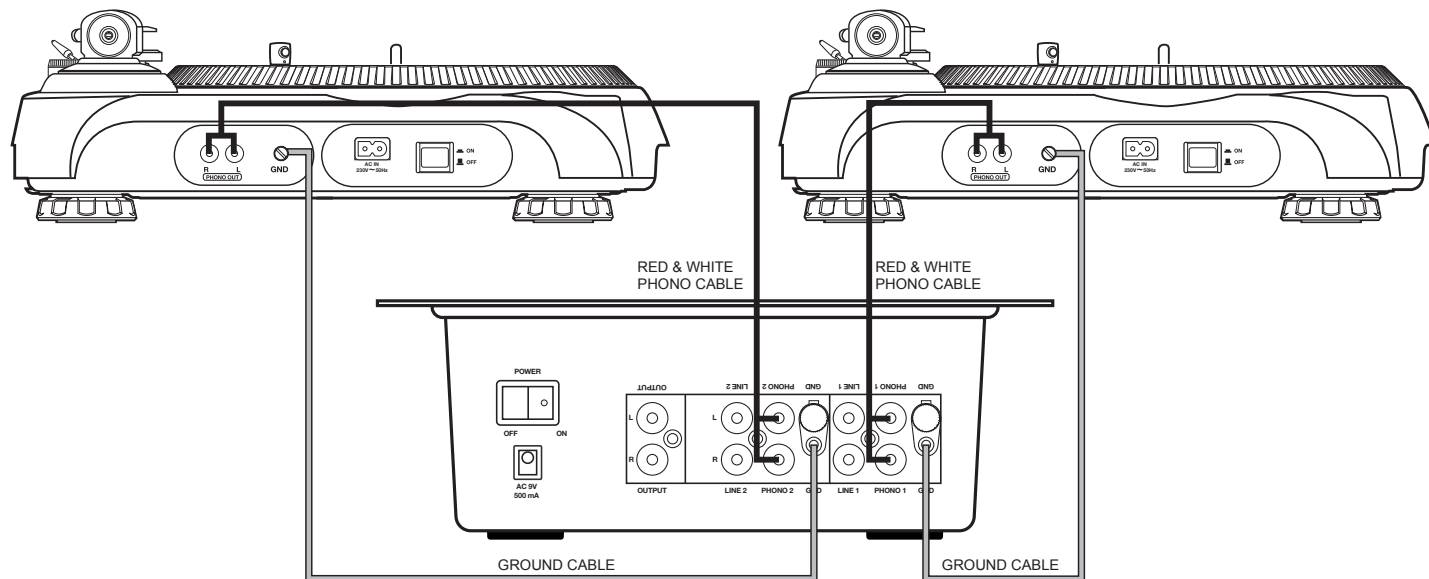




## CONNECTING THE TT-500M

For your convenience we have pre-fitted the cables between the two TT-500 turntables and the MIX-3 mixer. You should have already removed the items from the packaging as shown in the fast setup guide so that all items are pre-connected. Should you need to disconnect the cables and reassemble the system at another location, please observe the below diagram for connection details.

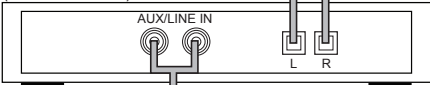
Please see the next page for details on how to connect the TT-500M to a suitable amplifier.



# CONNECTING TO EXTERNAL EQUIPMENT



AMPLIFIER / PA SYSTEM  
(NOT SUPPLIED)

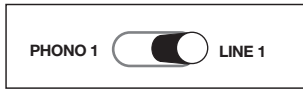
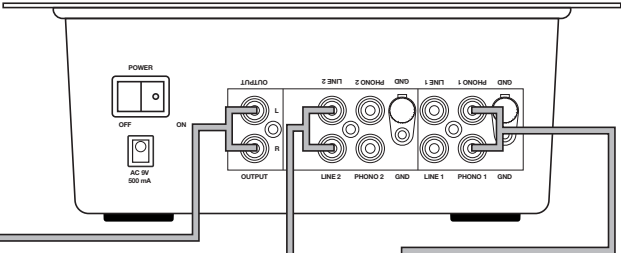


**NOTE:** It is possible to mix between a combination of phono and line level inputs. See below for connections to line level inputs using additional phono cables.

You will need to set the MIX-3 to the relevant input you wish to mix using the input selector toggle switches (4, pg 6). Select 'PHONO' for turntable inputs and 'LINE' for CD/TAPE/MD inputs.

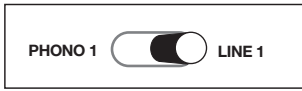
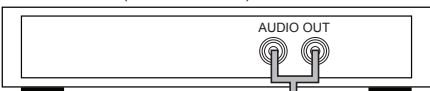
E.g. If you are mixing a turntable on channel 1 with a CD player on channel 2 then you would need to set the channel input selectors to 'PHONO 1' and 'LINE 2'

MIX-3



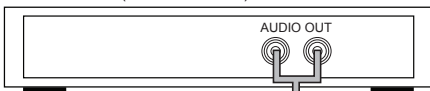
CHANNEL 1 INPUT  
SELECTOR (MIX-3)

CD / MD / TAPE (NOT SUPPLIED)



CHANNEL 2 INPUT  
SELECTOR (MIX-3)

CD / MD / TAPE (NOT SUPPLIED)



# GETTING GOING

## PRODUCING SOUND FROM THE TT-500M

Having ensured that all connections between the TT-500's and the MIX-3 are correct (see page 9) you are now able to produce sound from the system. Follow the guides below to test each of the major functions of the MIX-3 and TT-500's.

**Note: It is necessary to connect the MIX-3 to a suitable amplifier with speakers in order to hear the overall mix between channels. See page 10.**

Initially we suggest that the master level control (7, pg 6) is adjusted to approximately 10 o'clock (a third of its travel). This will give enough sound to be heard, but it is not enough volume to damage speakers should an accidental overload occur.

Before you begin, please ensure the following

1. Ensure that the crossfader (5, pg 6) is in its central position.
2. Ensure that the input selector switches (4, pg 6) are both set to PHONO.
3. Ensure that both of the channel faders are at their medium level.

To begin playing a record follow the steps below:

1. Turn on one of the turntables using the POWER button on the rear of the turntable (16, pg 5)
2. Place the record onto the turntable platter (use the 45rpm adapter if necessary)
3. Press the MOTOR OFF button (13, pg 4) to ensure the motor is rotating. This button will flash to indicate if the motor is switched off.
3. You can then start or stop the rotation of the platter using the START/ STOP button (1, pg 4)
4. Select your desired RPM speed using the REVOLUTION SPEED buttons (3 & 4, pg 4)

5. Whilst ensuring the cueing lever (10, page 4) is in the 'up' position, move the tone arm to the relevant point over the record.

6. Move the cuing lever to the 'down' position to allow the needle to make contact with the record.

**Note:** You can also use the MOTOR OFF button (13, pg 4) as a 'slow' play/pause button.

Repeat the above process with the remaining TT-500 so that there are records playing on both turntables. The signals from the turntables will now be fed into the MIX-3 mixer.

### Using the pitch adjust

Each TT-500 is fitting with a pitch adjust feature (7, pg 4) which allows you to decrease the pitch by 10% or increase the pitch by 10%. Adjusting the pitch also adjusts the speed at which the record plays. When mixing you should use the pitch adjust to match the speeds of the two records playing.

## TESTING THE MIXER FUNCTIONS

Now that you have setup your turntable and begun playing a record you can start using the mixer to adjust and mix the sound. Follow the guides below for using each of the MIX-3 features

### Using the channel faders

By pushing up the channel 1 fader, music from the TT-500 connected to channel 1 should now be heard from you speakers.

By pulling down the channel 1 fader and pushing up the channel 2 fader the sound from the remaining TT-500 will be output through your speakers.

The further up the channel faders are set, the louder the music will be.

### Using the channel gain controls

Some equipment may vary slightly in their output levels. Use the instructions below for how to correctly match too different input levels using the channel gain controls (3, pg 6).

1. Set both channel faders at equal levels (not maximum).
2. Connect the supplied headphones.
3. Use the cue selector switch (2, pg 6) to listen to the volume levels of each channel.
4. If one channel seems louder than the other, use the channel gain controls to increase/decrease the level of that channel so that both channels are equally matched.

## USING THE CROSSFADER

The MIX-3 is equipped with a user replaceable crossfader. Moving the crossfader from one side to the other will allow a seamless mix between the two music channels. If the crossfader is placed in its central position, both channel 1 and channel 2 can be heard through the speakers. If the crossfader is moved fully to the left, only sound from channel 1 will be heard. For example, if the channel 2 fader is pushed up with the crossfader in the left position, no sound from channel 2 can be heard.

If the crossfader is now moved from the left position over to the right position, the sound from channel 1 will reduce, and the sound from channel 2 will increase.

Conversely if the crossfader is now moved back to the left position, sound from channel 1 will reduce and sound from channel 2 will increase.

The crossfader can be used to great effect once beat matching is mastered, when the crossfader is moved from left to right or visa-versa, the beats of the relative tunes are matched and a fluid mix is achieved.

**TIP:** If the beats are not matched the resulting sound can sometimes be a mismatch of beats that sounds dreadful; this is what is called in the trade 'crashing the mix'.

## USING THE HEADPHONES

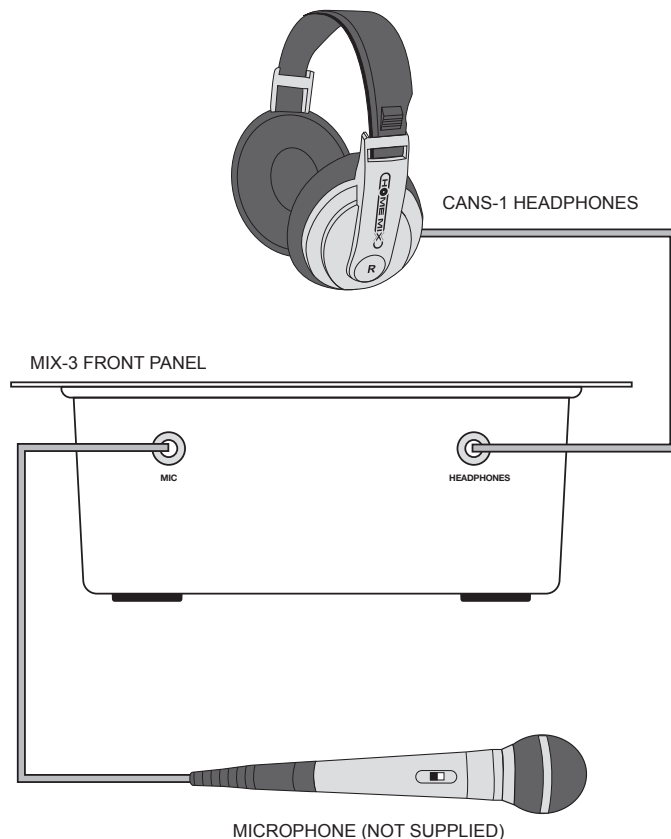
The MIX-3 is fitted with a cue mix arrangement. The cue facility allows a new track to be positioned or manipulated before it is played through your speakers. You will be able to determine if your beat matching is correct and will be able to assess the quality of your mix before broadcasting it. The volume of the headphones is controlled by the cue level control (8, pg 6). The MIX-3 is fitted with a powerful headphone amplifier for use in high volume environments. However, please ensure that headphones are used at safe listening levels.

The MIX-3 allows you to listen to each channel individually before the music is required in your performance. By switching the cue selector (2, pg 6) to the 'CH1' position, only music played by channel 1 can be heard through the headphones. By moving the cue selector to the 'CH2' position, only music played by channel 2 can be heard through the headphones. You can then move the switch to the '1 + 2' position to hear a mix of both channels through the headphones.

**TIP:** Always ensure that either the relevant channel fader is down, or the cross fader is away from the channel that you wish to cue in your headphones. Failure to do this will result in the music that you are cuing up to be output from the speakers over the track you are playing.

## USING A MICROPHONE (NOT SUPPLIED)

Insert a microphone (not supplied) into the MIC input socket (9, pg 7) on the front of the MIX-3. Your microphone is now ready to use. You can adjust the volume of the microphone using the MIC LEVEL control on the MIX-3 (1, pg 6).



# SPECIFICATIONS

**INPUT/OUTPUT IMPEDANCE & SENSITIVITY** (Master 0 dBV output, load=100K $\Omega$ . Maximum gain)

**LINE**

10 K $\Omega$  / -14 dBV (200 mV)    +/-2 dB

**PHONO**

47 K $\Omega$  / -50 dBV (3.16 mV)    +/-2 dB

**MIC**

2.2 K $\Omega$  / -60 dBV (1 mV)    +/-2 dB

**MASTER**

1 K $\Omega$

**PHONES (LOAD=32  $\Omega$ )**

33  $\Omega$  / -2 dBV (794 mV)    +/-2 dB (Cue selector at CH1+2)

**FREQUENCY RESPONSE** (Master out, EQ flat)

**LINE**

20 Hz - 20 KHz    +/-1 dB

**PHONO**

20 Hz - 20 KHz    +1/-2 dB (RIAA)

**MIC**

20 Hz - 20 KHz    +1/-2 dB

**THD + N** (Master 0 dBV output, maximum gain, w/20 kHz LPF)

**LINE**

Less than 0.02% 20-20 KHz    **NOTE** : 0 dBV=1 Vrms

**FADER MAXIMUM ATTENUATION** (w/20 kHz LPF)

**CHANNEL FADER**

Less than -80 dB at 1 KHz

**CROSSFADER**

Less than -80 dB at 1 KHz

**MAXIMUM OUTPUT** (Master out, THD=1%, maximum gain, EQ flat)

**MASTER**

More than +18dBV (8.0V) at load=100 K $\Omega$

**PHONES**

More than +4dBV (1.6V) at load=32  $\Omega$

**OUTPUT NOISE** (Maximum gain, EQ flat, w/20 KHz LPF, A-weighted)

**LINE**

Less than -90 dBV

**PHONO**

Less than -70 dBV

**MIC**

Less than -60 dBV

**CROSSTALK** (w/20 kHz LPF)

**LINE**

More than 70 dB at 1 KHz between L and R

More than 70 dB at 1 KHz between channels

**MAXIMUM INPUT** (1KHz, master out, THD=0.5%, EQ flat, maximum gain)

**LINE**

More than +4 dBV

**PHONO**

More than -32 dBV

**MIC**

More than -42 dBV

**CHANNEL BALANCE**

Within 3 dB

## TROUBLE SHOOTING

PROBLEM	POSSIBLE SOLUTION
<b>Platter does not rotate</b>	<ul style="list-style-type: none"><li>• Check to ensure the turntable is switched on.</li><li>• Check the fuse in the mains plug is not blown.</li><li>• Check to ensure the drive belt is fitted.</li></ul>
<b>No sound when playing record on turntable</b>	<ul style="list-style-type: none"><li>• Check the input selector is set to PHONO.</li><li>• Check the crossfader is in the correct position.</li><li>• Check the channel fader is at a reasonable level.</li><li>• Check the master volume is at a reasonable level.</li><li>• Check that the mixer is switched on.</li><li>• Ensure that you have connected to an amplifier.</li><li>• Ensure that your amplifier volume is at a reasonable level.</li></ul>
<b>No sound from line input</b>	<ul style="list-style-type: none"><li>• Ensure that you have set the channel input selector to 'LINE'.</li><li>• Ensure that you have connected to the line/audio out sockets on your external equipment.</li></ul>
<b>No sound from headphones</b>	<ul style="list-style-type: none"><li>• Check the cue level control.</li><li>• Check the cue channel selector is set correctly.</li></ul>
<b>Sound distortion</b>	<ul style="list-style-type: none"><li>• Reduce the channel gain level.</li><li>• Check inputs are connected to correct terminals.</li></ul>
<b>Loud buzzing</b>	<ul style="list-style-type: none"><li>• Ensure that the ground cables are connected the GND posts on both the mixer and the turntables</li></ul>

## CONTACT DETAILS

We trust you are completely satisfied with this product from Acoustic Solutions Limited, however please feel free to contact us if you experience any difficulties, or if you would like to express your views regarding our products.

Please write to:

Acoustic Solutions Limited.  
Grand Union Buildings  
54 High Street  
Weedon  
Northampton  
NN7 4QD  
United Kingdom

Telephone 0871 230 7747

Calls are charged at 10p per minute. Mobile call costs may vary. Please contact your service provider for details. This helpline is manned from 9:00am to 1:00pm and 2:00pm to 4:30pm, Monday to Friday. Calls cost 10p per minute. mobile costs may vary, please contact your network provider for details.

[www.acousticsolutions.co.uk](http://www.acousticsolutions.co.uk)

email: [enquiries@acousticsolutions.co.uk](mailto:enquiries@acousticsolutions.co.uk)

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